Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-12.   (Canceled)

14-25.   (Canceled)

26. (New) A distributed subscriber management system comprising:

a plurality of user networks, each user network connecting a respective group of users;

an integrated access device interposed between said plurality of user networks and an access network; and

a plurality of external networks connected to said access network, each said external network having an authentication server;

wherein said integrated access device comprises a set of at least two authentication clients shared by said plurality of user networks and operable to authenticate data units received from users belonging to any of said user networks and destined to any of said external networks.

27. (New) The distributed subscriber management system of claim 26 further including means for centralized access control between said user networks.

28. (New) The distributed subscriber management system of claim 26 further comprising a secure data-unit labeling system associated with said integrated access device for marking data units received from said user networks to produce marked data units so that each said marked data unit destined to a specific external network from among said plurality of external networks becomes illegible to any other of said external networks.

29. (New) The distributed subscriber management system of claim 26 wherein said set of at least two authentication clients uses a Remote Authentication, Dial-in User Service (RADIUS) protocol.

30. (New) The distributed subscriber management system of claim 26 further including, in said integrated access device, means for:

receiving a data unit from a user located on one of said plurality of user networks;

interrogating said user for access information;

encrypting said access information at said access control node prior to transmitting the access information to an authentication server; and

decrypting the access information at the authentication server.

31. (New) The distributed subscriber management system of claim 26 wherein said plurality of user networks includes a first number of user networks, said set of at least two authentication clients includes a second number of authentication clients, and said first number is unequal to said second number.

32. (New) An integrated access device comprising:

a user-network interface connecting to a plurality of user networks to receive data units from said plurality of user networks;

at least two authentication clients operatively connected to said user network interface for authenticating and authorizing data units received from said plurality of user networks; and

an external-network interface operatively connected to said at least two authentication clients and to an access network, said external-network interface operable to forward a data unit authorized by any of said at least two authentication clients to an external network from among a plurality of external networks connected to said access network.

33. (New) The integrated access device of claim 32 further comprising means for allocating discrete bandwidth levels to at least one of said user networks.

34. (New) The integrated access device of claim 32 further comprising:

means for service-level enforcing;

means for network-resource management;

means for collecting usage statistical usage; and

means for alarm monitoring.

35. (New) The integrated access device of claim 32, further comprising at least one of the following:

a password authentication protocol client;

a challenge handshake authentication protocol client;

a terminal-access controller-access control system client; and

a remote authentication dial-in user service protocol client.

36. (New) The integrated access device of claim 32 further comprising means for controlling admission to each of said user networks of users from each other user network of said plurality of user networks.

37. (New) The integrated access device of claim 32 wherein the user network interface includes a plurality of ingress cards and the external network interface includes an egress card.

38. A method of distributed subscriber management in a data network, the method comprising:

receiving, at a shared access device interposed between a plurality of user networks and an access network, data units from said plurality of user networks;

authenticating, at said shared access device, user data received from said plurality of user networks, by means of a plurality of shared RADIUS clients residing in said shared access device, prior to transmitting said user data through said access network;

allocating, by said shared access device, discrete bandwidth levels to individual user networks from among said plurality of user networks;

enforcing, by said shared access device, said discrete bandwidth levels; and

collecting, by said shared access device, statistics on traffic traversing said access network.

39. The method of claim 38 wherein at least one of said data units is sent through said access network to a RADIUS server associated with an external network from among a plurality of external networks.

40. The method of claim 39 including a further step of encrypting said at least one of said data units prior to said transmitting.

41. The method of claim 38 including a further step of controlling access between said user networks.